

loped, and cicatrices of ulcers existed in each groin. The left lobe of the cerebellum was found to be altogether wanting; and the left *crus cerebelli* consisted merely of a small tubercle connected with the pons. The right lobe of the cerebellum and the corresponding crus were healthy. The *crus cerebri* of the left side was smaller than that of the right, and the annular protuberance, owing to the different development of its left side, was irregular in its form, and placed obliquely, its longest diameter being from behind forwards, and to the right side. The origins of the nerves were normal. The right occipital fossa was remarkably shallow, and the *foramen magnum* was placed obliquely, its antero-posterior diameter being thrown towards the right side. *Ibid.*

4. *On the Anatomical Relation of the Blood-Vessels of the Mother to those of the Fetus in the Human Species.* By Dr. JOHN REID.—In this communication, it was proved, by preparations laid on the table, that numerous tufts of the placental vessels pass through the decidua, and enter by the open mouths of many of the uterine venous sinuses of the mother. Some of these tufts only dip into the open mouths of the sinuses; others extend their ramifications half an inch, and even in some rarer cases, more than an inch from the point at which they enter. That these tufts found bathed in the maternal blood of the uterine venous sinuses, are prolongations of the fetal placental vessels, was proved both by injection and by microscopic examination. Dr. Reid then proceeded to state, that on examining the placental vessels under the microscope, each minute branch of the umbilical arteries is bound up with a single branch of the umbilical vein, and that they go on dividing and subdividing in the same manner—each subdivision consisting of an artery and a vein so closely bound together, as to resemble a single vessel, when seen through the microscope in their uninjected state. All of these branches—each including an artery and a vein—terminate in blunt extremities, and there is no cellular tissue filling up the intervals between them. These blunt extremities, in which the branches of the tufts end, form the termination of the arteries, and the commencement of the veins. The inner coat of the venous system is reflected upon the placental tufts which project into the uterine sinuses, and is prolonged over the surface of all the placental vessels, forming sheaths enveloping each branch of these vessels, and thus constituting a kind of sac with numerous and intricate folds, or fringes projecting into its interior. Into this sac, the blood of the mother is poured by the curling arteries, and returns by the prolongations of the uterine veins. Each of the uterine sinuses into which the placental tufts project, may be considered a minutest representation of the structure of the placenta, for we have there fetal placental vessels resembling the branchial vessels of aquatic animals, covered by a prolongation of the inner coat of the vascular system of the mother, and hanging in a cavity filled with maternal blood.—*Report of Proceedings of British Association for Advancement of Science*, in *Athenæum*, Oct. 3, 1840.

5. *On the Anatomy of the Medulla Oblongata.* By Dr. JOHN REID.—The object of this communication was to point out the relative position of the motor and sensitive columns of the spinal chord, as they pass through the medulla oblongata and pons varolli, and the attachment of the different motor and sensitive nerves to these columns. Dr. Reid produced preparations of the medulla oblongata, to show that the decussation of the pyramidal bodies is formed by the greater, and in some cases nearly the whole, of the fibres constituting each of these eminences passing into the posterior part of the middle column of the opposite side. None of these decussating fibres run into the anterior column of the opposite side, nor is there any decussation in the medulla oblongata; besides, on tracing the column which is connected with the clinary body, and which may be termed the clinary column, we find that as it passed downwards, it approaches closely to the anterior median fissure, immediately below the decussation of the pyramidal columns, and affords attachment to many of the roots of the motor nerves. On tracing this clinary column upwards, it is found to expand over the clinary body, affording origin to the hypoglossal and abducens along its anterior

margin, and to the parts close along its posterior margin. Part of this column passes upwards to the corpora quadrigemina, affording origin to the smaller root of the 5th and to the trochleator. Dr. Reid also pointed out how the spinal accessory and part of the filaments of the par vagum may be connected with the motor column.—*Ibid.* October 17, 1840.

6. *New Observations on the Structure of the Gastro-intestinal Mucous Membrane, and more particularly of the Gastric and Intestinal Glands.* By Prof. ALLEN THOMPSON.—This paper was illustrated by a series of preparations of the gastric and intestinal glands of man, and some of the lower animals. After giving a sketch of the recent progress of the investigation of the structure of the mucous membrane and its glands, and alluding more particularly to the researches of Boyd, Boehm, Bischoff, Purkinje, Henle, Wasmann, and Baly, the author gave a general description of the structure and distribution of the gastric and intestinal glands in the human subject at different ages, and in the following animals, viz. the pig, sheep, and ox, horse, dog, cat, and lion, badger, porpoise. The author then entered into a detail of some observations which he had recently made on the gastric glands, and on the solitary glands of the large intestine, from which he forms the conclusion, that at an early period of life these glands have all the form of closed vesicles, and that as life advances in the early years they gradually become open. The author then stated, that he had frequently observed distinct central apertures in the vesicles composing the glands of Peyer in the pig, sheep, horse, and occasionally, but more rarely, in the adult human subject, never, however, in the child nor young subject. The author stated his opinion that the apertures surrounding the vesicle in the form of a zone, do not lead into the cavity of the vesicle. The author gave a minute description of the structure of these glands, and concluded by calling attention to the three distinct points which formed the subject of his inquiry, viz. 1st, The closed vesicular origin of the gastric glands in the child, and their occasional vesicular structure at a more advanced period of life; 2d, The closed vesicular condition of the solitary glands of the large intestine at the period of birth, and the occasional occurrence of this condition at a more advanced stage, and 3d, the occasional open condition of the vesicles of Peyer's glands. He farther adverted to the bearing of these observations on the theory of secretion in general, more particularly that recently offered by Henle, on the probable uses of the intestinal glandular secretions in the economy, and on the changes of these glands in the diseased condition.—*Ibid.* 17th October, 1840.

MATERIA MEDICA AND PHARMACY.

7. *Oil of Ergot—the Mode of Preparing it—its Physical and Chemical Properties.*—Mr. SAMUEL WRIGHT gives the following process as a convenient one for preparing the oil of ergot for ordinary purposes:—Digest the ergot in liq. potass. at a temperature of 120°–150°, until a perfect saponaceous solution be formed. The liquid is then to be diluted with half its weight of water, exactly neutralized with sulphuric acid, and submitted to distillation from a saline or an oil bath. The product is white, adhesive, and fatty-looking, almost free from empyreuma, and nearly tasteless.

The readiest and best, though unfortunately, the most expensive way of obtaining this oil, is, he says, by percolating ergot in a state of fine powder, with sulphuric ether. By allowing the ether to evaporate spontaneously, the oil of ergot is left in its purest form.

As thus prepared, he adds, it usually consists of two portions—the one, colourless and translucent, the other, having a reddish-brown hue. The latter character is an acquired one, and simply dependent upon the age of the ergot. In old specimens, the oil is coloured throughout, and often deeply; in recent ones, on the contrary, it is not unfrequently entirely free from colour.